Title (en)

PROCESS FOR FORMING PATTERN WITH NEGATIVE RESIST

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Application

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Abstract (en)

[origin: EP0124265A2] A process for forming patterns with a negative type resist which comprises the steps of forming a negative type resist film (2) made of quinone diazide oligomer having a polymerization degree of 10 or less such as quinone diazide sulfonic ester on a substrate (3), irradiating selectively with far ultraviolet rays having a wavelength of 180 - 300 nm to expose the above film, and then developing the film thus exposed by the use of a suitable developer such as a solution containing any one of acetic ester, alkyl ketone and cyclohexanone, and another process wherein the above described exposing step is carried out in such a manner that the quinone diazide sulfonic ester film is subjected to blanket exposure by means of ultraviolet rays having a longer wavelength than 300 nm, and the resist film thus exposed is further subjected to selective exposure by means of far ultraviolet rays of 300 nm or less. The resulting patterns exhibit favourable resolution, improved dry etching resistance and thermal resistance, and the resulting patterns exhibited overhung form.

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